I'm writing to strongly object to Broadband Internet over Powerline (BPL) implementation in its present form. While the High Frequency (HF) spectrum will definitely be affected in the immediate area, HF propagation will allow this interference to affect large areas, possibly affecting communications outside the United States. HF users affected will be the Military, Government, Air Traffic Control, Amateur Radio Emergency Communications, Military Affiliate Radio Service (MARS) stations and Public Safety users in the VHF-Lo band, a definite detriment to public safety, especially when Homeland Security is considered. For a very clear example of how severe this interference actually radiates, please see the American Radio Relay League video (using NIST calibrated equipment to document the interference) at http://www.arrl.org/tis/info/HTML/plc/.

In addition, many American businesses manufacture and/or sell HF equipment, including transceivers, antennas, software, transmission systems, and tower equipment. A severe HF spectrum compromise such as BPL will cause many of these businesses to fold or at the least lose a large customer base due to drastically reduced consumer demand if BPL is implemented. This translates directly to lost jobs and possibly more Americans on the unemployment lines instead of working and paying taxes. These companies include: SGC Corporation in Bellevue, Washington; MFJ Enterprises in Starkville, Mississippi; Cushcraft Corporation in Manchester, New Hampshire; M2 Antenna Systems in Fresno, California; Alpha Delta Communications in Manchester, Kentucky; Ten-Tec Corporation in Sevierville, Tennessee; RF Parts in San Marcos, California; GAP Antenna Products in Fellsmere, Florida; Texas Towers in Plano, Texas; as well as VHF-Lo manufacturers Motorola, General Electric, and many others.

## Some technical aspects:

- HF communication requires a transceiver and antenna at each end of the communications circuit. No intermediate equipment such as satellites, repeaters, etc. is required. BPL will compromise the critical backup link when these intermediate links fail again.
- Military members have frequently used HF communications when other mediums have failed. This includes satellites and repeaters. HF was the only path to communicate. I am very much against compromising this reliable backup system by implementing BPL when my lives might be at stake. HF has allowed critical communications to be passed when other systems simply didn't work.
- While some power companies work very hard to eliminate interference to other licensed services, FCC enforcement letters clearly indicate that many do not. Adding BPL to the current interference problems will not help.
- The Amateur Radio Service voluntarily contributes at any time to protection of life and property when called upon. This is evidenced by the National Weather Service (NWS) installing an Amateur radio station at the National Hurricane Center in Florida. Amateur Radio also has a documented history of public service in disasters such as hurricanes, wildfires, earthquakes, snowstorms, tornados, floods, and chemical spills. Amateur Radio operators are so highly

recognized by civil leaders that many nuclear power plants and local Emergency Operations Centers have incorporated Amateur Radio into their disaster plans. These services are provided at no charge by highly skilled and trained "hams". This extremely valuable resource will be severely compromised by being unable to reliably and effectively utilize the HF spectrum if BPL is implemented. Homeland Security officials recognize Amateur Radio's contribution and have made Amateur Radio a vital link in Homeland Security.

For these reasons BPL should NOT be implemented in its present form. The future may hold technological improvements allowing its use, but the current excessive economic, interference, and public safety cost is too exponentially disastrous to calculate. Homeland Security is much too vital to risk compromising with a service that is already met by many other means and means and has demonstrated such extremely high interference to a vital National Resource (the HF Spectrum).